

CLAIMS

1. A polynucleotide comprising at least 17 contiguous nucleotides from the 26-nucleotide sequence of SEQ ID NO: 1.
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2. A polynucleotide according to claim 1 comprising at least 18 contiguous nucleotides from the 26-nucleotide sequence of SEQ ID NO: 1.
3. A polynucleotide according to claim 1 comprising at least 20 contiguous nucleotides
10 from the 26-nucleotide sequence of SEQ ID NO: 1.
4. A polynucleotide according to claim 1 comprising the sequence of SEQ ID NO: 1.
5. A polynucleotide comprising at least 17 contiguous nucleotides from the 26-nucleotide
15 sequence of SEQ ID NO: 2.
6. A polynucleotide according to claim 5 comprising at least 18 contiguous nucleotides from the 26-nucleotide sequence of SEQ ID NO: 2.
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7. A polynucleotide according to claim 5 comprising at least 20 contiguous nucleotides from the 26-nucleotide sequence of SEQ ID NO: 2.
8. A polynucleotide according to claim 5 comprising the sequence of SEQ ID NO: 2.
9. A polynucleotide according to any of the preceding claims comprising the sequence of
25 SEQ ID NO: 8.
10. An insect resistant plant comprising a VIP3A protein and a polynucleotide according to any of claims 1 to 9.
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11. A plant according to claim 10 which is a cotton plant.

12. An insecticidal cotton plant according to claim 11 which is derived from the COT202 event.

13. A method of detecting plant material derived from the COT202 event comprising:

- 5 (a) obtaining a sample for analysis;
- (b) providing DNA from the sample;
- (c) providing a pair of primers designed to bind to a polynucleotide as claimed in claims 1 to 9 when said polynucleotide is single stranded;
- (d) amplifying the region which lies between the sites at which the primers bind; and
- 10 (e) detecting the presence of the amplification product;

whereby the presence of the amplification product is indicative that the sample is derived from the COT202 event.

14. A method according to claim 13 wherein the first primer has the sequence of SEQ ID

15 NO: 3 and the second primer has the sequence of SEQ ID NO: 4.

15. A method of detecting plant material derived from the COT202 event comprising:

- (a) obtaining a sample for analysis;
- (b) providing a probe designed to bind to the complement of a polynucleotide as claimed in claims 1 to 9 when said polynucleotide is single stranded;
- 20 (c) hybridising said probe with the sample; and
- (d) detecting whether the probe has hybridised;

whereby the hybridisation of the probe is indicative that the sample is derived from the COT202 event.

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16. A method according to claim 15 wherein the sequence of the probe is selected from the group comprising SEQ ID NO: 7 and SEQ ID NO: 8.

17. A method according to claims 15 or 16 wherein the probe hybridises to the sample

30 under stringent hybridisation conditions.

18. A method of detecting plant material derived from the COT202 event comprising:

- (a) obtaining a sample for analysis;

(b) providing an antibody designed to bind to a VIP protein contained within a plant according to claims 10 to 12;

(c) incubating said antibody with the sample; and

(d) detecting whether the antibody has bound;

5 whereby the presence of antibody which has bound is indicative that the sample is derived from the COT202 event.

19. A method of detecting plant material derived from the COT202 event comprising:

(a) obtaining a sample for analysis;

10 (b) making a protein extract of the sample;

(c) providing a test strip designed to detect the presence of a VIP protein present within the sample;

(d) incubating the test strip with the sample; and

(e) detecting whether VIP protein is present;

15 wherein the presence of VIP protein is indicative that the sample is derived from the COT202 event.

20. A method according to claim 18 or 19 wherein the VIP protein has the sequence of SEQ ID NO: 9.

21. A method of detecting plant material derived from the COT202 event comprising:

(a) obtaining a sample for analysis;

(b) subjecting one or more insects of the species *Spodoptera frugiperda* to the sample;

(c) subjecting one or more insects of species *Ostrinia nubilalis* to the sample as a control;

25 (d) detecting whether the sample has an insecticidal effect on insects from each species; and

(e) comparing the results with an authentic COT202 bioassay profile.

30 22. A kit of parts comprising a means for detecting the presence in a sample of plant material derived from the COT202 event.

23. A kit of parts according to claim 22 comprising a means for detecting the presence in a sample of a polynucleotide according to claims 1 to 9, or a protein encoded by a polynucleotide according to claims 1 to 9, or a VIP protein.
- 5 24. A kit of parts according to claims 22 or 23 comprising in the form of instructions one or more of the methods according to claims 13 to 21.
25. Use of the nucleotide sequences according to any one of claims 1 to 9 in a method of detecting the COT202 event.